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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,165	02/09/2005	Andres Quinta Cortinas	6463/PCT	5233

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EXAMINER
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SMITH, KIMBERLY S

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,165

Applicant(s)

QUINTA CORTINAS ET AL.

Examiner

Kimberly S. Smith

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. ***The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.*** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The disclosure is objected to because of the following informalities: the specification is inclusive of numerous instances of the form and legal phraseology used in patent claims. Words such as "said" should be avoided. Appropriate correction is required.

### *Claim Objections*

3. Claim 4 recites the limitation "said buoy" in line 4. There is insufficient antecedent basis for this limitation in the claim. As the independent claim includes limitations drawn to an intermediate support buoy and a surface buoy, the use of said buoy does not properly define the buoy to which the claim is directed. The reference to "said buoy" is being construed as - -said end buoy- -.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marissal, US Patent 5,653,193 in view of Streichenberger, US Patent 4,257,350 and further in view of Byle, US Patent 6,431,107 and further in view of Zemach et al., US Patent 5,412,903 (Zemach).

Marissal discloses a shellfish farm comprising at least one line of cables (1) bearing spaced culture ropes (i.e. ropes from which net 24 are suspended), the line being suspended horizontally from two end floats (i.e. the two outermost floats (18)) which support the at least one line in association with intermediate support buoys (i.e. the buoys (18) intermediate of the end floats) and is further anchored by dead weights (10, 12) positioned at each end of the at least one line (as viewed in Figure 1), wherein the at least one line of cables is submersible and is elevated from a sea floor while guided by vertical movement of the two end floats (reference Figure 1). However, Marissal discloses the dead weights are kentledges, i.e. pig iron, not concrete. Byle shows that concrete is an equivalent structure of pig iron known in the art (column 2, line 31). Therefore, because these two ballast weights were art-recognized

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equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute concrete for pig iron in instances where pig iron was not readily available for manufacture. Marissal further does not disclose the two end floats being submerged or raised based on inner volume of the floats being variable and being connected to a surface buoy including an air intake valve. Streichenberger teaches within the same field of endeavor the use of floats (31) being submerged and raised based on an inner volume of the float being variable and being connected to a surface buoy (7) including an air intake valve (Figure 6) for adjusting the depth of the aquatic device dependent upon the expected weather conditions (i.e. rough seas subsequent to stormy weather). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the variable depth floats as taught by Streichenberger with the device of Marissal in order to provide for a device which can be lowered in the water to minimize damage to the structure during rough weather. Marissal further discloses the floats are connected to the dead weights but Marissal does not disclose the use of an anchoring system. Zemach teaches within the same field of endeavor the use of an anchoring system (reference Prior Art disclosure of Figures 1A and 1B) having an anchoring system connected to dead weights for maintaining tension on the cable when the aquatic device is lowered in the water during rough weather. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the anchoring system as taught by the prior art of Zemach with the device of Marissal as modified by Streichenberger so as to maintain tension on the line when the device is lowered in the water for avoiding rough weather.

Regarding claim 4, Marissal as modified discloses an anchoring system (as taught by Zemach) that comprises at least one end buoy (14, Zemach) and arranged so as to use uplift

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thrust of the buoy to pull at each end of the floats by means of tensioning cables 912, Zemach) and pulleys affixed to the dead weights (as discussed in Zemach at column 2, lines 12-14).

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lavoie (US 4,766,846), Communal (EP 137087A1), Yamaguchi (JP 2005110612), Espuna (FR 2562385), Espuna (FR 2562386).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly S. Smith whose telephone number is 571-272-6909.

The examiner can normally be reached on Monday thru Friday 10:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kimberly S Smith  
Examiner  
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